

UNITED STATES
ENVIRONMENTAL PROTECTION
AGENCY-REGION 7

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7

11201 RENNER BOULEVARD
LENEXA, KANSAS 66219

BEFORE THE ADMINISTRATOR

In the Matter of:

Big Ox Energy-Siouxland, LLC

Respondent

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Docket No. CAA-07-2018-0292

ADMINISTRATIVE ORDER FOR COMPLIANCE ON CONSENT

PRELIMINARY STATEMENT

1. The United States Environmental Protection Agency, Region 7 (EPA or Complainant) and Big Ox Energy-Siouxland, LLC (Respondent or Big Ox) have agreed to voluntarily enter into this Administrative Order for Compliance on Consent (Order) for the purpose of carrying out the goals of Sections 110 and 112(r) of the Clean Air Act (CAA), 42 U.S.C. §§ 7410 and 7412(r).

2. This Order requires Respondent to comply with the requirements of Sections 110 and 112(r) of the CAA, 42 U.S.C. §§ 7410 and 7412(r). All activities specified below shall be initiated and completed as soon as possible even though maximum time periods for their completion may be specified herein. The terms of this Order shall not be modified except by a subsequent written agreement between the parties.

JURISDICTION

3. The following Order is entered into and issued pursuant to the authority of Sections 113(a)(3)(B) of the CAA, 42 U.S.C. § 7413(a)(3)(B), as amended.

PARTIES

4. Complainant, by delegation from the Administrator of the EPA and the Regional Administrator, EPA Region 7, is the Director of the Air and Waste Management Division, EPA, Region 7.

5. Respondent is Big Ox Energy-Siouxland, LLC, a business in good standing under the laws of the state of Wisconsin, and doing business in the state of Nebraska. Respondent owns and operates a biogas production and packaging facility located at 1616 D Avenue, Dakota City, Nebraska.

STATUTORY AND REGULATORY BACKGROUND

6. In response to growing public concern and awareness of the threats posed by accidental release of extremely hazardous substances, Congress amended the CAA in 1990 to include the accidental release provisions found in Section 112(r), 42 U.S.C. § 7412(r). The objective of Section 112(r) of the CAA, 42 U.S.C. § 7412(r), is to prevent the accidental release, and to minimize the consequence of any such release, of any substance listed pursuant to Section 112(r)(3) of the CAA, 42 U.S.C. § 7412(r)(3), or any other extremely hazardous substance.

7. Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1), commonly referred to as the General Duty Clause, is designed to impose a general duty on owners and operators to operate a safe facility free of accidental releases that threaten life or property by taking all feasible actions that are available to reduce hazards which are known to exist at the facility or which have been identified for similar facilities in the same industrial group. S. Rep. No. 228, 101st Cong., 1st Sess. 208 (1989).

8. Specifically, Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1), sets forth that owners and operators of stationary sources producing, processing, handling or storing substances listed pursuant to Section 112(r)(3), 42 U.S.C. § 7412(r)(3), or any other extremely hazardous substance, have a general duty in the same manner and the same extent as the Occupational Safety and Health Act, 29 U.S.C. § 654 *et. seq.* to identify hazards which may result from accidental releases using appropriate hazard assessment techniques, to design and maintain a safe facility, taking such steps as are necessary to prevent releases, and to minimize the consequences of accidental releases which do occur.

9. Pursuant to Section 112(r)(3), 42 U.S.C. § 7412(r)(3), EPA promulgated a list of substances, which in the case of an accidental release, are known to cause or may reasonably be anticipated to cause death, injury, or serious adverse effects to human health or the environment. This list is codified at 40 C.F.R. § 68.130.

10. Section 302(e) of the CAA, 42 U.S.C. § 7602(e), defines “person” to include any individual, corporation, partnership, association, State, municipality, political subdivision of a State, and any agency department, or instrumentality of the United States and any officer, agent, or employee thereof.

11. Section 112(r)(2)(C) of the CAA, 42 U.S.C. § 7412(r)(2)(C), defines “stationary source” as any buildings, structures, equipment, installations or substance-emitting stationary activities which belong to the same industrial group, which are located on one or more contiguous properties, which are under the control of the same person (or persons under common control), and from which an accidental release may occur.

12. Section 112(r)(2)(B) of the CAA, 42 U.S.C. § 7412(r)(2)(B), defines “regulated substance” as a substance listed pursuant to Section 112(r)(3) of the CAA, 42 U.S.C. § 7412(r)(3).

13. Section 112(r)(2)(A) of the CAA, 42 U.S.C. § 7412(r)(2)(A), and 40 C.F.R. § 68.3 define “accidental release” as an unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationary source.

14. Section 110 of the CAA, 42 U.S.C. § 7410, grants the Administrator of the EPA the authority to approve a state plan which provides for the implementation, maintenance, and enforcement of a standard in each air quality control region within the state.

15. Nebraska’s construction permit program is part of the federally-approved state implementation plan (SIP). Neb. Admin. Code Title 129. Ch. 17. 79 Fed. Reg. 45108 (Aug. .4, 2014).

16. Nebraska Administrative Code Title 129, Chapter 4 § 007 states,

007 Total reduced sulfur

Level: 10.0 parts per million (10.0 ppm)
Averaging time: 1 minute
Form: Maximum average concentration

Level: 0.10 parts per million (0.10 ppm)
Averaging time: 30-minutes
Form: Maximum rolling average

007.01 Except as provided in 007.01A and 007.01B these standards apply only where human exposure occurs.

007.01A Ambient concentrations of total reduced sulfur (TRS) emissions occurring as a result of natural activities that have no associated economic benefits, such as seasonal stratification or turnover of lakes and lagoons, and the release of water uncontaminated by process or industrial activity from lakes, reservoirs, lagoons and water impoundment systems shall not constitute violation of the standards contained in section 007.

007.01B The Department shall provide reasonable opportunity for any owner or operator of any source causing or contributing to a violation of the standards in 007 to develop and implement a program to eliminate such violations prior to taking enforcement action.

007.02 Unless otherwise approved by the Director, the levels of TRS in the ambient air shall be measured using a TRS thermal converter in conjunction with a sulfur dioxide (SO₂) monitor. The SO₂ monitor shall be designated as an EPA reference method or equivalent method in accordance with 40 CFR Part 53. In combination, the monitor must meet or exceed the following minimum specifications:

007.02A Lower detection limit of 0.4 ppb (parts per billion);

007.02B Zero Drift less than 0.5 ppb in 24 hours and less than 1 ppb in 7 days at constant conditions;

007.02C Span Drift of less than 0.5 percent of the reading in 24 hours and less than 1 percent of the reading in 7 days at constant conditions;

007.02D Precision of 0.5 percent of the reading; and

007.02E Linearity of 1 percent of full scale.

007.03 A rolling average shall be considered valid if there is data for at least 75 percent of the period in question. In the event that less than 100 percent of the data are available, the rolling average shall be computed on the basis of the data available using the number of data available as the divisor.

007.04 The standards are attained when all of the following conditions are met:

007.04A. The one-minute concentration is less than or equal to 10.0 ppm, rounded to one decimal place (fractional parts equal to or greater than 0.05 ppm must be rounded up);

007.04B. The 30-minute rolling arithmetic mean concentration is less than or equal to 0.10 ppm, rounded to two decimal places (fractional parts equal to or greater than 0.005 ppm must be rounded up);

17. Nebraska Administrative Code Title 129, Chapter 4 § 007 is part of the federally-approved SIP. See 81 Fed. Reg. 70023 (Oct. 11, 2016).

18. Nebraska Administrative Code Title 129, Chapter 35 allows sources to notify the Nebraska Department of Environmental Quality of excess emissions due to startup, shutdown, and malfunction. Chapter 35 provides specifications to sources regarding submissions to NDEQ under this provision.

19. Nebraska Administrative Code Title 129, Chapter 35 005 states,

005 Malfunction and Unplanned Shutdown Reporting. The owner or operator of an installation subject to this chapter shall notify the director, in writing, whenever emissions due to malfunctions, unplanned shutdowns or ensuing start-ups are, or may be, in excess of applicable emission control regulations. Such notification shall be mailed within 48 hours of the beginning of each period of excess emissions, and shall include, but not be limited to, the information required by 004. This notice is not required providing the following conditions are met:

005.01 A certified continuous emissions monitor is in operation throughout the duration of the period of malfunction, shutdown or ensuing start-up; and

005.02 The period of malfunction, shutdown or ensuing start-up is less than 1 hour in duration.

20. Nebraska Administrative Code Title 129, Chapter 35 is part of the federally approved SIP. *See* 65 Fed. Reg. 3130 (Jan. 20, 2000).

21. Nebraska Administrative Code Title 129, Chapter 32 states, Section 001 states,

001 Handling, Transportation, Storing. No person may cause or permit the handling, transporting or storage of any material in a manner which may allow particulate matter to become airborne in such quantities and concentrations that it remains visible in the ambient air beyond the premises where it originates.

22. Nebraska Administrative Code Title 129 Chapter 32 is part of the federally approved SIP. *See* 60 Fed. Reg. 372 (Jan. 4, 1995).

23. Nebraska Administrative Code Title 129 Chapter 34 Section 008 allows for the use of all credible evidence in enforcement actions and states as follows:

008 Notwithstanding any other provisions of this Title, the following methods may be used to determine compliance with applicable requirements:

008.01 A monitoring method approved for the source and incorporated in an operating permit pursuant to Chapter 8;

008.02 Any compliance test method specified in the State Implementation Plan;

008.03 Any test or monitoring method approved for the source in a permit issued pursuant to Chapters 17, 19, or 27;

008.04 Any test or monitoring method provided for in this Title; or

008.05 Any other test, monitoring, or information-gathering method that produces information comparable to that produced by any method described in 008.01 through 008.04.

24. Nebraska Administrative Code Title 129 Chapter 34 Section 008 is part of the federally approved SIP. *See* 81 Fed. Reg. 69693 (Oct. 7, 2016); *See also* 62 Fed. Reg. 8314 (Feb. 24, 1997).

25. Section 113(a)(3)(B) of the CAA, 42 U.S.C. § 7413(a)(3)(B), grants the Administrator the authority to make a finding of violation of a requirement or prohibition of Title I, and upon such a finding, to issue an order requiring a person to comply with such requirement or prohibition.

EPA's FINDINGS OF FACT AND CONCLUSIONS OF LAW

26. Respondent is, and at all times referred to herein was, a "person" as defined by Section 302(e) of the CAA, 42 U.S.C. § 7602(e).

27. Respondent is the owner or operator of the biogas production facility located at 1616 D Avenue, Dakota City, Nebraska (the Facility).

28. The Facility is a "stationary source" as defined by Section 112(r)(2)(C) of the CAA, 42 U.S.C. § 7412(r)(2)(C).

29. The Nebraska Department of Environmental Quality issued two construction permits to the Facility. Construction Permit CP15-008 was issued on April 5, 2016. Construction Permit CP17-033 was issued on April 9, 2018. CP17-033 supersedes permit CP15-008. CP17-033 was issued pursuant to Nebraska Administrative Code Title 129. Ch. 17.

30. The construction permit states, "any permit noncompliance shall constitute a violation of the Nebraska Environmental Protection Act and the Federal Clean Air Act, and is grounds for enforcement action or permit revocation." *See* CP17-033 I. (B).

31. Construction Permit CP15-008 III.(A)(3)(c) states emission point EU06: Digester Biogas Flare, "shall be limited to 500 operating hours per any period of twelve (12) consecutive calendar months. At no time during the first eleven (11) months after startup shall the total operating hours for EU06, excluding the pilot, exceed 500 hours.

32. Construction Permit CP17-033 II.(C)(1) states, in pertinent part, "All permitted emissions units, associated emissions conveyances, required control equipment, and required monitoring equipment shall be properly installed, operated, and maintained. All emissions from emissions units using required controls shall be captured and routed through associated emission conveyances to the required control equipment."

33. Construction Permit CP17-033 III.(A)(3)(a) states, "Emissions from the emission units identified in Condition III.(A)(1) [digester biogas flare and H₂S Dry Media Scrubber and Biogas Cleanup Skid System] shall be controlled by pollution controls units as described in Condition III.(A)(I).

34. Construction Permit CP17-033 III.(A)(3)(g) states, "Biogas routed to EP06 shall not exceed 2,300 ppm of H₂S volume concentration over a thirty minute average."

35. Construction Permit CP17-033 III.(A)(3)(i), states “The source shall install a certified H₂S CEMS after the Digesters and prior to EU06 to measure H₂S volume concentration (in ppm) to demonstrate compliance with Condition III.(a)(3)(g).”

36. Respondent operates biodigester systems at the Facility that process biomass waste streams to produce biogas. At certain points in the production process, the biogas produced contains a mixture of methane, hydrogen sulfide (H₂S), and carbon dioxide. As a result, Respondent produces, processes, handles and stores biogas, methane and H₂S at the Facility.

37. Biogas, methane, and H₂S are regulated substances and extremely hazardous substances pursuant to Section 112(r)(2)(B) of the CAA, 42 U.S.C. § 7412(r)(2)(B).

38. Respondent is subject to the requirements of Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1), because it is the owner and operator of a stationary source that is producing, processing, handling or storing substances listed pursuant to Section 112(r)(3), 42 U.S.C. § 7412(r)(3), and/or extremely hazardous substances.

39. On a number of occasions from May 2018 to present, biodigester process upsets have occurred at the Facility resulting in overflow of partially digested organic material and water from the anaerobic digesters. Respondent cleaned up more than 4.4 million gallons of liquid and 1.27 million pounds of solids as a result of these upsets pursuant to a separate Consent Order with NDEQ. In certain instances, these upsets caused pressure to build and temporarily activate pressure relief valves, and resulted in the temporary accidental release of biogas containing methane, carbon dioxide, and H₂S .

40. Air monitoring conducted by EPA, Region 5, on June 26 and 28, 2018, at the Facility’s boundary and surrounding area using geospatial measurement of air pollution (GMAP) equipment detected levels of H₂S in the ambient air in excess of 100 parts per billion (ppb).

41. EPA requested information from Respondent pursuant to Section 114 of the CAA, 42 U.S.C. § 7414, on July 3, 2018. Information submitted by Respondent in response on July 26, 2018, via email for questions 25 and 30 b and h, and via letter on August 2, 2018, for the remaining questions, including data generated from personal monitors worn by Facility personnel. The personal monitors are used by Facility personnel pursuant to Respondent’s policies and training programs, as required by OSHA, to ensure that all affected personnel wear protective-respirators to avoid breathing potentially harmful quantities of H₂S. Data collected from the personal monitors measured detections of H₂S on at least 420 occasions that instantaneously exceeded 100 parts per million (ppm) from January of 2018 thru June of 2018, and therefore triggered the requirement for all affected personnel to wear respirator protection. Pressure relief valves appear to have activated 107 times from January to June of 2018. The National Institute for Occupational Safety and Health and Occupational Safety and Health Administration have defined the “immediately dangerous to life and health” (IDLH) value for H₂S at 100 ppm. OSHA defines IDLH as the “level that interferes with the ability to escape.”

42. Air monitoring conducted by EPA, Region 5, on June 26 and 28, 2018, at the Facility's boundary and surrounding area using GMAP equipment detected levels of methane averaging 29 ppm, with a maximum reading of 199 ppm. A lower explosive limit (LEL) is the lowest concentration (in air) that is needed for the gas to ignite and explode. Methane LEL is 5% or 50,000 ppm as set by the National Toxicology Program, in 1992.

43. EPA requested information from Respondent pursuant to Section 114 of the CAA, 42 U.S.C. § 7414, on July 3, 2018. Information submitted by Respondent in response on July 26, 2018, via email for questions 25 and 30 b and h, and via letter on August 2, 2018, for the remaining questions. After discussions on August 16, 2018, Respondent supplemented the response with methane personal monitor data, on August 21, 2018, that revealed that certain personal monitoring equipment detected methane above LEL on about 79 occasions from February 15 of 2018 thru August 9 of 2018. Data submitted as part of the EPA 114 Request demonstrates that up to 100% LEL has been encountered by personnel monitors on the roof of the facility.

44. Gas detection alarms should be set at a level low enough to ensure the health and safety of people but high enough to prevent false alarms. OSHA 29 C.F.R. Section 1915.12(b)(3), shipyard standards, define flammable atmospheres as atmospheres with a concentration of flammable vapors at or above 10% of the LEL.

45. In the *Guidance to Protect POTW Workers from Toxic and Reactive Gases and Vapors* EPA sites action levels of, 10% to 25% as a range to continue operation with extreme caution, attempt to identify specific combustible gases or vapors present; and greater than 25% LEL as fire/explosion hazard exists, leave immediately (EPA 812-B-92-001).

46. The *Technical Guidance for Hazards Analysis ("Green Book")*, by U.S. Environmental Protection Agency, Federal Emergency Management Agency, and U.S. Department of Transportation, from December 1987, states that 50% LEL is a conservative level that accounts for uncertainties like the uneven dispersion within the cloud and the estimated value of the lower flammability limit, and contains calculations for determining the consequence distances for Vapor Cloud Fires, using 50% LEL.

47. Respondent set 10% LEL and half of IDLH as evacuation criteria in its Emergency Action Plan.

48. On August 6, 2018, EPA sent a Monitoring Order and Request for Information pursuant to Section 114 of the CAA, 42 U.S.C. § 114. EPA began receiving monitoring data from Respondent on August 21, 2018.

49. On February 13 and 14, 2017, EPA conducted an inspection at the Facility.

50. The Nebraska Department of Environmental Quality (NDEQ) has shared information with EPA regarding the Facility.

51. NDEQ found during an inspection on July 26, 2018, that “A couple of access hatches were open to spray water into the tank to control foaming.” The partially open hatches allowed unquantified amounts of fugitive emissions of biogas containing concentrations of H₂S and methane into the ambient air.

52. NDEQ found during an inspection on July 26, 2018 that certain components of the centrifuges, mixer pH and temperature probes and a section of roof on digester #1 were not being properly maintained or operated as designed and intended.

EPA’s FINDINGS OF VIOLATIONS

53. The facts stated in Paragraphs 1 through 52 above are herein incorporated.

54. Based on the information available to EPA, including the results of the monitoring detailed above, EPA has determined that Respondent failed to comply with its general duty, pursuant to Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1), to design and maintain a safe facility, taking such steps as are necessary to prevent releases, and to minimize the consequences of accidental releases which do occur, such failure is a violation of Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1).

55. Based on the information available to EPA, including the results from the June 26 and June 28, 2018, air monitoring, information submitted in response to the CAA § 114 information request, and the CAA § 114 Monitoring Order, EPA has determined that Respondent failed to comply with its Construction Permit, Nebraska Administrative Code Title 129, Chapter 4 § 007 of the Nebraska State Implementation Plan, pursuant to Section 110 of the CAA, 42 U.S.C. § 110.

56. Based on information submitted in response to the July 3, 2018 Section 114 Information Request, EPA has determined that Respondent exceeded the allotted 500 hours of Flare operation per any twelve consecutive calendar months Construction Permit CP15-008 III.(A)(3)(c). Based on information submitted to EPA from Respondent demonstrates that between January 1 and April 8, 2018, Respondent operated the Flare for 661 hours.

57. Based on the information available to EPA, EPA has determined that on February 13 and 14, 2017, Respondent failed to properly operate the Flare EP 06. EPA inspection showed flames and smoke exiting EP 06. EP 06 is designed to be a smokeless flare.

58. Based on information received from NDEQ, EPA has determined that Respondent failed to properly control emissions from emissions units as required by CP17-033.

59. Based on information received from NDEQ, EPA has determined that Respondent failed to properly operate and maintain the anaerobic digesters #1 and #2 as required by CP17-033.

60. Based on information received from NDEQ, EPA has determined that Respondent allowed particulate matter to be emitted offsite in such a manner that quantities and concentrations remained visible in the ambient air beyond the property line per Chapter 32 I (1).

61. Based on information submitted in response to the July 3, 2018, Section 114 Information Request and information received from NDEQ, EPA has determined that Respondent failed to meet the requirements of Condition E with regards to submitting all required information in Respondent's Exception reports for excess emissions due to malfunctions, unplanned shutdowns, and ensuing start-ups that are, or may be, in excess of applicable emission limits shall be reported to the NDEQ in accordance with Chapter 35, Section 005.

62. Based on information submitted in response to the July 3, 2018, Section 114 Information Request, EPA finds that Respondent failed to maintain an H₂S concentration of less than 2300 ppm to be routed to EP 06.

63. Based on information submitted in response to the July 3, 2018, Section 114 Information Request, EPA finds that Respondent failed to install a certified H₂S CEMS after the Digesters and prior to EU06 and EP 07 to measure H₂S volume concentration (in ppm) to demonstrate compliance with Condition III.(A)(3)(g-h).

ORDER FOR COMPLIANCE

64. Based upon the Findings of Fact and Conclusions of Law, and Findings of Violations set forth above, and pursuant to the authority of Section 113(a)(3)(B) of the CAA, 42 U.S.C. § 7413(a)(3)(B), Respondent is hereby ORDERED and AGREES to take the actions described below.

65. Within sixty (60) days of the effective date of this Order, unless otherwise specified below, Respondent must comply with the requirements of Section 112(r)(1) of the CAA, 42 U.S.C. § 7412(r)(1), in order to prevent any further accidental releases of H₂S or methane, and to minimize the consequences of any release that does occur, including, but not limited to, completion of the following compliance actions:

- a. Design and maintain a safe facility, taking such steps as are necessary to prevent releases of methane, H₂S, and any other extremely hazardous substances; including, but not limited to the following actions:
 - i. Within twenty-one (21) days of the effective date of this Order, submit a plan to: (i) repair any and all cracks in the anaerobic digesters to prevent release of methane, H₂S, and any other extremely hazardous substances; and (ii) repair the expansion joints in the anaerobic digesters to prevent release of methane, H₂S, and any other extremely hazardous substances (Repair Plan). The Repair Plan shall include safety procedures and

- precautions and be certified by a professional engineer with expertise in the fields of: (i) anaerobic digestion; (ii) the handling of H₂S and methane; and (iii) concrete structural engineering; that is in the business of performing such tasks as shutting down, opening and repairing anaerobic digesters, and has performed such work for a minimum of five (5) years (pre-qualification requirements). Documentation of pre-qualification requirements shall be included with submission of the Repair Plan;
- ii. Within seven (7) days of the submission of the Repair Plan, address or correct any Repair Plan deficiencies requested by the EPA;
 - iii. Within sixty (60) days of the effective date of this Order, complete the Repair Plan utilizing a professional engineer meeting the pre-qualification requirements specified in Paragraph 65(a)(i);
 - iv. Within forty-five (45) days of the effective date of this Order, repair and/or replace pressure relief devices on the anaerobic digesters to prevent release of methane, H₂S, and any other extremely hazardous substances;
 - v. Repair and/or replace all non-functional process instrumentation (including but not limited to pH and temperature probes), or plug non-functional process instrumentation if able to demonstrate safe operation without original design process equipment, to prevent release of methane, H₂S, and any other extremely hazardous substances; and
 - vi. Within ten (10) days of the effective date of this Order, submit a report to EPA summarizing any and all release points of extremely hazardous substances, including biogas, from the Facility (Release Report). The Release Report shall be revised and updated within two (2) days of Respondent's discovery of any additional release points not summarized in the originally submitted Release Report;
 - vii. Within thirty (30) days of the effective date of this Order, submit a revised and updated Release Report including a schedule and plan for addressing any and all release points; and
 - viii. For each of the five (5) mixers in Digester 1 and Digester 2, and their connected or adjacent components:
 - 1. Within thirty (30) days of the effective date of this Order, implement repairs to prevent any and all accidental releases of extremely hazardous substances, including biogas, from the digester mixers;
 - 2. Within forty-five (45) days of the effective date of this Order, submit a report to EPA detailing a schedule and a plan to repair or shut down each mixer, if able to demonstrate safe operation without the shut down mixer (Mixer Repair Report), and submit bi-weekly progress reports detailing implementation of the plan to repair or shut down each mixer (Mixer Repair Progress Reports).
- b. Minimize the consequences of any accidental release of methane, H₂S, or any other extremely hazardous substances, which do occur by taking the following actions including, but not limited to:

- i. Relocating pressure relief valve release points to minimize the consequences of accidental release of methane, H₂S, and any other extremely hazardous substances;
- ii. Develop and implement a plan to conduct air monitoring in the event of a release and include a process to share monitoring data with local emergency responders to minimize the consequences of accidental release of methane, H₂S, and any other extremely hazardous substances; and
- iii. Develop and implement a Response Plan for informing the public, including first responders and local residences within the worst-case scenario, in the event of a release resulting in evacuation of any part of the facility, in the event of a H₂S release exceeding 50 ppm at the fence line, and in the event of a methane release detected at 10% LEL at the fence line.

66. On or before November 30, 2018, install, use, and maintain, two (2) H₂S monitors, at the Facility's boundary line, one in the direction of the NW prevailing wind and one (1) in the direction of the SE prevailing wind, that are calibrated to detect H₂S levels at a minimum of 100 ppb (H₂S monitoring). Beginning on December 4, 2018, and continuing every Tuesday thereafter until notice of termination of this Order is received or otherwise agreed by the Parties, Respondent shall submit to EPA a log of the data resulting from the H₂S monitoring that includes the level of H₂S detected and time of detection.

67. Within forty-five (45) days of the effective date of this Order, install H₂S monitors in accordance with CP17-033 III.(A)(3)(i)(i).

68. Within forty-five (45) days of the effective date of this Order, conduct an engineering evaluation of the flare to ensure compliance with CP17-033.

69. Within thirty (30) days of the effective date of this Order, develop a written procedure for employees and contractors regarding the application of dry products outdoors to ensure compliance with the Nebraska state implementation plan.

70. Respondent must provide documentation of completion of these compliance actions to EPA within seventy (70) days of the effective date of this Order. All documentation shall be submitted as directed below.

Submissions

71. All submissions to EPA required by this Order shall contain the following certification signed by an officer of the Respondent:

I certify under penalty of law that I have examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately

responsible for obtaining the information, the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment. (Signature)

72. All submissions to EPA required by this Order shall be sent to:

Dave Hensley
Chemical and Oil Release Prevention Branch
United States Environmental Protection Agency, Region 7
11201 Renner Boulevard
Lenexa, Kansas 66219.

73. All documents submitted by Respondent to EPA in the course of implementing this Order shall be available to the public unless identified as confidential by Respondent pursuant to 40 C.F.R. Part 2, Subpart B, and determined by EPA to merit treatment as confidential business information in accordance with applicable law.

Stipulated Penalties

74. Respondent shall be liable for stipulated penalties in the amount set forth for failure to comply with the requirements of this Order as follows:

- a. Stipulated Penalties for exceedances of the emission levels described below at the Facility boundary line, as detected by the H₂S monitoring detailed in Paragraph 66 of this Order:

Boundary line H ₂ S emissions between 0.1 ppm and 10 ppm	For the first 30 minute rolling average exceedance	\$5,000
	For each subsequent violation beyond the first 30 minute rolling exceedance	\$500 per minute
	Beyond 60 minutes in a calendar day	\$46,192
Boundary line H ₂ S emissions that exceed 10 ppm	For longer than a one minute interval	\$30,000 per minute
	For longer than 10 minutes in a calendar day	\$46,192

Prior to the assessment of stipulated penalties for any exceedance of the emission levels described above at the Facility boundary line, the EPA shall review and consider any credible evidence provided by Respondent demonstrating H₂S emissions from an upstream source, if such evidence is provided within fifteen (15) days of Respondent's receipt from EPA of a demand for payment of penalties.

- b. Stipulated Penalties for failure to come into compliance with the CAA and failure to comply with the requirements of this Order, as specified in paragraphs 65 through 70:

<u>Penalties per Violation per Day</u>	<u>Period of Noncompliance</u>
\$1,000	1 st through 30 th day
\$2,500	31 st day and beyond

75. All penalties shall begin to accrue on the day after the complete performance is due or the day the violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity.

76. The payment of penalties shall not alter in any way Respondent's obligation to comply with the provisions of this Order.

77. All penalties accruing under this section of the Order shall be due and payable to the United States within thirty (30) days of Respondent's receipt from EPA of a demand for payment of penalties. Such payments shall identify Respondent by name and docket number and shall be paid by certified or cashier's check made payable to "United States Treasury" and sent to:

U.S. Environmental Protection Agency
Fines and Penalties
Cincinnati Finance Center
P.O. Box 979077
St. Louis Missouri, 63197-9000.

78. A copy of the payment set forth in this section shall be sent to:

Sara Hertz Wu
Senior Counsel
United States Environmental Protection Agency, Region 7
11201 Renner Boulevard
Lenexa, Kansas 66219; and to

Dave Hensley
Chemical and Oil Release Prevention Branch
United States Environmental Protection Agency, Region 7
11201 Renner Boulevard
Lenexa, Kansas 66219.

79. Failure to pay any portion of the stipulated penalties on the date upon which they are due will result in the accrual of interest on the unpaid portion of the stipulated penalties. Pursuant to 31 U.S.C. §3717, EPA is entitled to assess interest and penalties on debts owed to the United States and a charge to cover the cost of the processing and handling a delinquent claim.

Interest will therefore be assessed at a rate of the United States Treasury tax and loan rate in accordance with 4 C.F.R. §102.13(c). A charge will be assessed to cover the costs of debt collection, including processing and handling costs and attorneys' fees. In addition, a non-payment penalty charge of six percent per year compounded annually will be assessed on any portion of the debt which remains delinquent more than ninety (90) days after payment is due. Any such non-payment penalty charge on the debt will accrue from the date the penalty payment becomes due and is not paid. 4 C.F.R. §§ 102.13(d) and (e).

General Provisions

80. Section 113(a)(3)(B) of the CAA, 42 U.S.C. § 7413(a)(3)(B), grants EPA the authority to issue an Order to any person found in violation of Sections 110 and 112(r) of the CAA, 42 U.S.C. §§ 7410 and 7412(r), or the regulations promulgated pursuant thereto.

81. By entering into this Order, Respondent (1) consents to and agrees not to contest EPA's authority or jurisdiction to issue or enforce this Order, (2) agrees to undertake all actions required by the terms and conditions of this Order, and (3) consents to be bound by the requirements set forth herein.

82. Respondent neither admits nor denies the facts and the alleged violations and findings stipulated herein. Respondent preserves its rights to challenge EPA's claims, except as provided in Paragraph 83, including its Findings of Violations, with respect to any litigation or disputes involving any third-parties not bound by this agreement.

83. Solely with regard to the EPA and NDEQ, Respondent waives any and all remedies, claims for relief, and otherwise available rights to judicial or administrative review that Respondent may have with respect to any issue of fact or law set forth in this Order, including, but not limited, any right of judicial review of this Order under Section 307(b)(1) of the CAA, 42 U.S.C. § 7607(b)(1), or under the Administrative Procedure Act, 5 U.S.C. §§ 701-706.

84. Failure to comply with any of the provisions of this Order may result in an enforcement action under Section 113 of the CAA, 42 U.S.C. § 7413. Under Section 113(a) of the CAA, the Administrator is authorized to address such a violation as follows:

- a. Issue an administrative penalty order assessing a civil penalty not to exceed \$46,192 per day of violation;
- b. Bring a civil action for permanent or temporary injunction, or to recover a penalty not to exceed \$46,192 per day of violation, or both; or
- c. Request the Attorney General to commence a criminal action pursuant to Section 113(c) of the CAA.

85. In accordance with Section 113(a)(4) of the CAA, 42 U.S.C. § 7413(a)(4), issuance of this Order does not preclude EPA or any state from assessing penalties or taking any

other action authorized under the CAA. This Order does not affect the obligation of Respondent to comply with all federal, state and local statutes, regulations and permits.

86. EPA may subsequently amend this Order, in writing, in accordance with the authority of the CAA. In the event of any such subsequent amendment to this Order, all requirements for performance of this Order not affected by the amendment shall remain as specified by the original Order. Any amendment will be transmitted to Respondent.

87. If any provision or authority of the Order or the application of the Order to Respondent is held by federal judicial authority to be invalid, the application to Respondent of the remainder of the Order shall remain in full force and effect and shall not be affected by such a holding.

88. Nothing in this Order shall limit EPA's right to obtain access to, and/or inspect the Facility, and/or to request additional information from Respondent pursuant to the authority of Section 114 of the CAA, 42 U.S.C. § 7414.

89. This Order shall become effective and enforceable on the date that it is signed by all Parties.

90. This Order shall remain in effect until a written notice of termination is issued by an authorized representative of EPA. Such notice shall not be given until all of the requirements of this Order have been met.

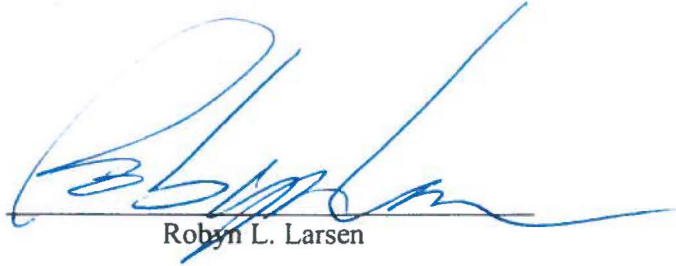
91. Unless otherwise stated, all time periods stated herein shall be calculated in calendar days from such date.

92. Pursuant to Section 113(a)(4), 42 U.S.C. § 7413(a)(4), the state of Nebraska has been provided notice of this action.

93. This Order shall apply to and be binding upon Respondent, its agents, successors and assigns. Respondent shall ensure that any directors, officers, employees, contractors, consultants, firms or other persons or entities acting under or for it with respect to matters included herein comply with the terms of this Order.

RESPONDENT
BIG OX ENERGY – SIOUXLAND, LLC

Date: September 19, 2018 By:



Robyn L. Larsen

Manager on the Board of Managers

U.S. ENVIRONMENTAL PROTECTION AGENCY

Date: 9/19/18



Mark A. Smith
Acting Director
Air and Waste Management Division
U.S. Environmental Protection Agency, Region 7



Sara Hertz Wu
Senior Assistant Regional Counsel
Office of Regional Counsel
U.S. Environmental Protection Agency, Region 7

CERTIFICATE OF SERVICE

I certify that on the date noted below I hand delivered the original and one true copy of this Administrative Order for Compliance to the Regional Hearing Clerk, United States Environmental Protection Agency, Region 7, 11201 Renner Boulevard, Lenexa, Kansas 66219.

I further certify that on the date noted below, I sent by certified mail, return receipt requested, a true and correct copy of the signed original Order for Compliance on Consent, to:

Northwest Registered Agent Service, Inc.
Big Ox Energy-Siouxland, LLC
530 S. 13th Street, Suite 100
Lincoln, Nebraska 68508


Name

9/19/2018
Date